

# **PUBLIC HEALTH REPORT**

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INFECTIOUS hepatitis was reported with unprecedented frequency in 1961 both in California and in the United States as a whole. Although the incidence has dropped noticeably in 1962, this year appears to be second only to last year, when 6,195 cases were reported in the state.

Because of the mounting importance of hepatitis, an intensive surveillance program was begun in the spring of 1961 by the U. S. Public Health Service. Study data in California were obtained from local health departments.

The statewide attack rate based on reported cases for the 52 weeks of the study was 35.3 per 100,000 persons, which is close to the national figure for that interval. California's highest attack rates occurred in the mountain counties, although Merced County, with one localized epidemic, had the highest rate of any single jurisdiction. Moreover, 56.5 per cent of the patients were 20 years of age and older.

This preponderance of cases in adults, which has also been noted in certain eastern states, is not well understood and was one of the observations that prompted the study. No geographic pattern is evident to suggest reasons for this high proportion of cases in adults or the wide variations among jurisdictions.

Five factors were looked into. Previous hospitalization was noted for less than eight per cent of the cases, and in only three per cent had the patient been in hospital two weeks to two months before onset. Personal contact with a person who had infectious hepatitis was recalled in over 30 per cent of the histories, with family members accounting for almost half of these contacts. Contact history was more frequent among the younger age groups.

Consumption of raw foods was an item of interest because of the outbreaks elsewhere in the country traced to contaminated clams and oysters. However, less than 100 patients recalled eating raw clams or oysters within eight weeks of the onset of disease, and in some of these instances, the shellfish were of eastern origin.

Consumption of other raw foods was so common an event that no epidemiologic significance could be ascribed to it. Water supply was identified as being of community origin in about 90 per cent of the histories, and in most of the remainder approved private sources were used.

A history of blood or plasma transfusion or other injection was obtained from about one-fourth of the patients. In most of the more than 100 cases in which the patient received transfusion, this procedure was implicated in the subsequent hepatitis.

Although the study did not make provision for recording fatal outcome, there were 36 histories which included a note regarding the death of the patient, indicating a case fatality rate of 0.8 per cent.

The present study, which continues and will soon be improved by the inception of a revised history form, has shown that a great deal of data can be assembled on short notice in order to clarify the growing public health problem of viral hepatitis. The vital questions concerning the high incidence of the disease, its unusual age distribution, and the varied and perhaps unsuspected routes of spread have not been answered with finality, but several clues and new avenues of approach have been suggested.

The local health officers and their staffs who contributed energetically to this surveillance study merit much praise and gratitude. The continuation and refinement of this effort should help to bring under control infectious hepatitis, a disease which is disturbing in its elusiveness, frequency and morbidity.

Controlled fluoridation of water supply of the city of Gridley again demonstrates the effectiveness of this economical public health measure in reducing tooth decay.

Gridley's children have 38 per cent fewer cavities after only eight years of controlled fluoridation, and in addition, one-third of them have no decay at all in their permanent teeth. Eight years ago only 10 per cent of the children were decay-free. In 1956, 76 per cent of the children needed immediate dental care for their permanent teeth. Now only 35 per cent need immediate care.

The department's fifth annual summer epidemiology training program concluded in late August. Thirty-eight medical students from 28 schools participated this year. The trainees participated in 20 different research and field projects covering a wide spectrum of public health activities in 12 bureaus and laboratories.